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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,265	11/08/2003	Robert P. Cazier	100111142-1	4901

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EXAMINER	
MADDEN, GREGORY VINCENT	
ART UNIT	PAPER NUMBER
2622	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/705,265	CAZIER ET AL.	
	Examiner	Art Unit	
	Gregory V. Madden	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☒ Claim(s) *7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 7 is objected to because of the following informalities: Claim 7 recites *"...processing circuitry (that comprises a control algorithm..."* (emphasis added). Please note that the parenthesis before the word "that" is included in error. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi (U.S. Pat. 5,486,893) in view of Norita et al. (U.S. Pat. 6,906,751).

First, regarding **claim 1**, the Takagi reference teaches a camera comprising a lens (taking lens L), an image sensor (pickup element 1) for receiving images viewed by the lens, and processing circuitry (CPU 10) that comprises a control algorithm that implements an automated zoom control function (composition calculation) that automatically records a plurality of closely related images having different zoom levels upon capture. Please refer to Figs. 1, 10, and 15, and Col. 4, Lines 38-58, and Col. 8, Line 55 – Col. 10, Line 15. What Takagi does not specifically teach is that the camera comprises a shutter button, and that from the recorded closely related images having different zoom levels, the user selectively chooses images for storage. However, noting the Norita reference, Norita teaches a camera comprising a shutter button (release button 31), a lens (lens unit 10), an image sensor (solid state image

sensor 9) for receiving images viewed by the lens, and processing circuitry (microcomputer 1) that comprises a control algorithm that automatically records a plurality of closely related images upon depressing of the shutter button, and from which the user selectively chooses images for storage (in recorder 70). Please refer to Figs. 1, 4, and 19, and Col. 5, Line 42 – Col. 6, Line 65, Col. 9, Line 15 – Col. 10, Line 60, and Col. 13, Line 63 – Col. 14, Line 13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the user-selected image storage of a plurality of closely related images, as taught by Norita, with the camera that automatically records a plurality of closely related images having different zoom levels upon capture, as disclosed by Takagi. One would have been motivated to do so because, as Norita teaches in Col. 3, Line 62 – Col. 4, Line 2, it would be advantageous to allow a user to select a captured image having desired settings from a plurality of captured images, as such a setting reduces the time involved in preliminary imaging, thereby reducing the time required to capture a satisfactory image.

As for **claim 2**, the limitations of claim 1 are taught above, and the Takagi reference further teaches that the zoom levels are predetermined in Col. 9, Line 63 – Col. 10, Line 10.

Considering **claim 3**, the limitations of claim 1 are taught above, and while neither Takagi nor Norita teaches that the zoom levels are postdetermined, as in the case of electronic (or digital) zooming, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have postdetermined the zoom levels used in capturing the plurality of closely related images. One would have been motivated to do so because such a postdetermination of zoom levels further reduces the time required in the initial capture of the plurality of closely related images (as shown to be advantageous by Norita in Col. 3, Line 62 – Col. 4, Line 2), as no optical zoom settings are necessary. Thus, the user is able to capture a desired image without regard to a time lag associated with the optical zoom system.

In regard to **claim 4**, once again the limitations of claim 1 are taught above, and the Takagi reference also discloses that the camera comprises mechanical zoom control (zoom motor controlling

circuit 25) that moves certain optical elements of the lens (L) to different physical positions. See Col. 4, Lines 40-41 and Fig. 1.

As for **claim 5**, again the limitations of claim 1 are taught above, and while neither the Takagi nor the Norita references teach that the camera comprises a digital zoom control wherein pixels of a recorded image are removed from the recorded image and the resultant image is scaled to its original size to create the illusion of zoom capture, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have included a digital zoom control into the camera of Takagi in view of Norita. One would have been motivated to do so because such a digital zoom control would further reduces the time required in the initial capture of the plurality of closely related images (as shown to be advantageous by Norita in Col. 3, Line 62 – Col. 4, Line 2), as no optical zoom settings are necessary. Thus, the user is able to capture a desired image without regard to a time lag associated with the optical zoom system.

Regarding **claim 6**, the limitations of claim 1 are set forth above, and the Takagi reference further teaches that the control algorithm (from CPU 10) implements automated wide angle capture wherein different wide angle settings are prestored, and when image capture is commenced, a plurality of images are automatically recorded at different wide angle and zoom settings. Please refer to Fig. 10 and Col. 8, Line 55 – Col. 10, Line 15.

Next, considering **claim 7**, the Takagi reference teaches a camera comprising a lens (taking lens L), an image sensor (pickup element 1) for receiving images viewed by the lens, and processing circuitry (CPU 10) that comprises a control algorithm that implements an automated wide angle capture function (composition calculation) that automatically records a plurality of closely related images having different wide angle views upon capture. Please refer to Figs. 1, 10, and 15, and Col. 4, Lines 38-58, and Col. 8, Line 55 – Col. 10, Line 15. What Takagi does not specifically teach is that the camera comprises a shutter button, and that from the recorded closely related images having different wide angle views, the

user selectively chooses images for storage. However, noting the Norita reference, Norita teaches a camera comprising a shutter button (release button 31), a lens (lens unit 10), an image sensor (solid state image sensor 9) for receiving images viewed by the lens, and processing circuitry (microcomputer 1) that comprises a control algorithm that automatically records a plurality of closely related images upon depressing of the shutter button, and from which the user selectively chooses images for storage (in recorder 70). Please refer to Figs. 1, 4, and 19, and Col. 5, Line 42 – Col. 6, Line 65, Col. 9, Line 15 – Col. 10, Line 60, and Col. 13, Line 63 – Col. 14, Line 13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the user-selected image storage of a plurality of closely related images, as taught by Norita, with the camera that automatically records a plurality of closely related images having different wide angle views upon capture, as disclosed by Takagi. One would have been motivated to do so because, as Norita teaches in Col. 3, Line 62 – Col. 4, Line 2, it would be advantageous to allow a user to select a captured image having desired settings from a plurality of captured images, as such a setting reduces the time involved in preliminary imaging, thereby reducing the time required to capture a satisfactory image.

As for **claim 8**, the Takagi reference teaches a method comprising the steps of configuring a camera to have a lens (taking lens L), an image sensor (pickup element 1) for receiving images viewed by the lens, and processing circuitry (CPU 10) that comprises a control algorithm that implements an automated zoom control function (composition calculation), wherein the camera automatically records a plurality of closely related images having different zoom levels upon capture. Please refer to Figs. 1, 10, and 15, and Col. 4, Lines 38-58, and Col. 8, Line 55 – Col. 10, Line 15. What Takagi does not specifically teach is that method comprises a camera configured to have a shutter button, and that from the recorded closely related images having different zoom levels, images are selectively chosen for storage. However, noting the Norita reference, Norita teaches a method wherein a camera is configured to comprise a shutter button (release button 31), a lens (lens unit 10), an image sensor (solid state image

sensor 9) for receiving images viewed by the lens, and processing circuitry (microcomputer 1) that comprises a control algorithm that automatically records a plurality of closely related images upon depressing of the shutter button, and from which the user selectively chooses images for storage (in recorder 70). Please refer to Figs. 1, 4, and 19, and Col. 5, Line 42 – Col. 6, Line 65, Col. 9, Line 15 – Col. 10, Line 60, and Col. 13, Line 63 – Col. 14, Line 13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the method of user-selected image storage of a plurality of closely related images, as taught by Norita, with the method that automatically records a plurality of closely related images having different zoom levels upon capture, as disclosed by Takagi. One would have been motivated to do so because, as Norita teaches in Col. 3, Line 62 – Col. 4, Line 2, it would be advantageous to allow a user to select a captured image having desired settings from a plurality of captured images, as such a setting reduces the time involved in preliminary imaging, thereby reducing the time required to capture a satisfactory image.

As for **claim 9**, the limitations of claim 8 are taught above, and the Takagi reference further teaches that the zoom levels are predetermined in Col. 9, Line 63 – Col. 10, Line 10.

Considering **claim 10**, the limitations of claim 8 are taught above, and while neither Takagi nor Norita teaches that the zoom levels are postdetermined, as in the case of electronic (or digital) zooming, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have postdetermined the zoom levels used in capturing the plurality of closely related images. One would have been motivated to do so because such a postdetermination of zoom levels further reduces the time required in the initial capture of the plurality of closely related images (as shown to be advantageous by Norita in Col. 3, Line 62 – Col. 4, Line 2), as no optical zoom settings are necessary. Thus, the user is able to capture a desired image without regard to a time lag associated with the optical zoom system.

In regard to **claim 11**, once again the limitations of claim 8 are taught above, and the Takagi reference also discloses that the camera comprises mechanical zoom control (zoom motor controlling

circuit 25) that moves certain optical elements of the lens (L) to different physical positions. See Col. 4, Lines 40-41 and Fig. 1.

As for **claim 12**, again the limitations of claim 8 are taught above, and while neither the Takagi nor the Norita references teach that the camera comprises a digital zoom control wherein pixels of a recorded image are removed from the recorded image and the resultant image is scaled to its original size to create the illusion of zoom capture, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have included a digital zoom control into the camera of Takagi in view of Norita. One would have been motivated to do so because such a digital zoom control would further reduces the time required in the initial capture of the plurality of closely related images (as shown to be advantageous by Norita in Col. 3, Line 62 – Col. 4, Line 2), as no optical zoom settings are necessary. Thus, the user is able to capture a desired image without regard to a time lag associated with the optical zoom system.

Considering **claim 13**, again the limitations of claim 8 are taught above, and the Takagi reference discloses that the step of automatically recording the images comprises automatically recording a plurality of closely related images having different zoom levels upon capture. Please refer to Figs. 1, 10, and 15, and Col. 4, Lines 38-58, and Col. 8, Line 55 – Col. 10, Line 15.

Next, in regard to **claim 14**, the Takagi reference teaches a camera comprising an imaging means for selectively coupling images from an image scene (taking lens L), an image sensing means (pickup element 1) for sensing the images coupled by the imaging means, and processing means (CPU 10) that implements an automated zoom control function (composition calculation) that automatically records a plurality of closely related images having different zoom levels upon capture. Please refer to Figs. 1, 10, and 15, and Col. 4, Lines 38-58, and Col. 8, Line 55 – Col. 10, Line 15. What Takagi does not specifically teach is that the recorded closely related images having different zoom levels, and that the user selectively chooses images for storage. However, noting the Norita reference, Norita teaches a

camera comprising a imaging means (release button 31 and lens unit 10), an image sensing means (solid state image sensor 9) for receiving images viewed by the lens, and processing means (microcomputer 1) that comprises a control algorithm that automatically records a plurality of closely related images, from which the user selectively chooses images for storage (in recorder 70). Please refer to Figs. 1, 4, and 19, and Col. 5, Line 42 – Col. 6, Line 65, Col. 9, Line 15 – Col. 10, Line 60, and Col. 13, Line 63 – Col. 14, Line 13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the user-selected image storage of a plurality of closely related images, as taught by Norita, with the camera that automatically records a plurality of closely related images having different zoom levels upon capture, as disclosed by Takagi. One would have been motivated to do so because, as Norita teaches in Col. 3, Line 62 – Col. 4, Line 2, it would be advantageous to allow a user to select a captured image having desired settings from a plurality of captured images, as such a setting reduces the time involved in preliminary imaging, thereby reducing the time required to capture a satisfactory image.

As for **claim 15**, the limitations of claim 14 are taught above, and the Norita reference also teaches that the imaging means comprises a shutter button (release button 31) and a lens (lens unit 10), as is taught in Fig. 1 and Col. 5, Line 42 – Col. 6, Line 65.

Regarding **claim 16**, the limitations of claim 14 are taught above, and the Takagi reference further teaches that the zoom levels are predetermined in Col. 9, Line 63 – Col. 10, Line 10.

Considering **claim 17**, the limitations of claim 14 are taught above, and while neither Takagi nor Norita teaches that the zoom levels are postdetermined, as in the case of electronic (or digital) zooming, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have postdetermined the zoom levels used in capturing the plurality of closely related images. One would have been motivated to do so because such a postdetermination of zoom levels further reduces the time required in the initial capture of the plurality of closely related images (as shown to be advantageous by

Norita in Col. 3, Line 62 – Col. 4, Line 2), as no optical zoom settings are necessary. Thus, the user is able to capture a desired image without regard to a time lag associated with the optical zoom system.

In regard to **claim 18**, once again the limitations of claim 15 are taught above, and the Takagi reference also discloses that the camera comprises mechanical zoom control (zoom motor controlling circuit 25) that moves certain optical elements of the lens (L) to different physical positions. See Col. 4, Lines 40-41 and Fig. 1.

As for **claim 19**, again the limitations of claim 14 are taught above, and while neither the Takagi nor the Norita references teach that the camera comprises a digital zoom control wherein pixels of a recorded image are removed from the recorded image and the resultant image is scaled to its original size to create the illusion of zoom capture, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have included a digital zoom control into the camera of Takagi in view of Norita. One would have been motivated to do so because such a digital zoom control would further reduces the time required in the initial capture of the plurality of closely related images (as shown to be advantageous by Norita in Col. 3, Line 62 – Col. 4, Line 2), as no optical zoom settings are necessary. Thus, the user is able to capture a desired image without regard to a time lag associated with the optical zoom system.

Finally, regarding **claim 20**, the limitations of claim 14 are set forth above, and the Takagi reference further teaches that the control algorithm (from CPU 10) implements automated wide angle capture wherein different wide angle settings are prestored, and when image capture is commenced, a plurality of images are automatically recorded at different wide angle and zoom settings. Please refer to Fig. 10 and Col. 8, Line 55 – Col. 10, Line 15.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Miyatake et al. (U.S. Pat. 6,750,903): See Fig. 3 and Col. 7, Lines 32-45

Arita et al. (U.S. Pat. 5,172,234): See Figs. 1a-1c and Col. 2, Lines 49-64

Stavely et al. (U.S. Pub. 2005/0219386)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory V. Madden whose telephone number is 571-272-8128. The examiner can normally be reached on Mon.-Fri. 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregory Madden
March 20, 2007

NGOC-YEN VU
SUPERVISORY PATENT EXAMINER